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RAW SEQUENCE LISTING DATE: 09/13/2000 PATENT APPLICATION: US/09/649,811 TIME: 18:20:28 Input Set : A:\471cll.app Output Set: N:\CRF3\09132000\1649811.raw 4 <110> APPLICANT: Xu, Jiangchun Lodes, Michael J. Secrist, Heather Benson, Darin R. Meagher, Madeleine Joy King, Gordon E. 12 <120> TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND 13 DIAGNOSIS OF COLON CANCER AND METHODS FOR THEIR USE 16 <130> FILE REFERENCE: 210121.471C11 ENTERED C--> 18 <140> CURRENT APPLICATION NUMBER: US/09/649,811 19 <141> CURRENT FILING DATE: 2000-08-28 21 <160> NUMBER OF SEQ ID NOS: 1083 23 <170> SOFTWARE: FastSEQ for Windows Version 3.0 25 <210> SEQ ID NO: 1 26 <211> LENGTH: 458 27 <212> TYPE: DNA 28 <213> ORGANISM: Homo sapien 30 <220> FEATURE: 31 <221> NAME/KEY: misc_feature 32 <222> LOCATION: (1)...(458) 33 <223> OTHER INFORMATION: n = A, T, C or G 35 <400> SEQUENCE: 1 W--> 36 ncaggtctgg cggcacctgt gcactcagcc gtcgatacac tggtcgattg ggacagggaa 60 gacgatgtgg ttttcaggga ggcccagaga tttggagaag cggatgaagt tctcctttag 120 ttccgaagtc agctccttgg ttctcccgta gagggtgatc ttgaagtact ccctgttttg 180

agaaactttc ttgaagaaca ccatagcatg ctggttgtag ttggtgctca ccactcggac

gaggtaactc gttaatccag ggtaactctt aatgttgccc agcgtgaact cgccgggctg

gcaacctgga acaaaagtcc tgatccagta gtcacacttc.ttttcctaa acaggacgga

ggtgacattg tagetettgt ettettteag eteatagatg gtggeataea tettttgegg

cagggtccat aggtgatccg caactctcga gcatttatat acaatagcaa atcatccagt

gtgttgtaca gtctataata ctccaacagt ctcccatctg tattcaatgg cgccacccaa

tacagtcctt tgtttggatg ctggggagag taatccctac cccaagcacc atatagataa

gaaaaccctc tccagttgag ctgaaccaca gacggtttgc tgatgttcac cacaccacca

tgaccacagc tccctggagt gggaggaggg tggacgacag gggtgttttg atctttagag

getteacact ettteagett ggtetteaga geeacgattt eteggegaat ggeaaggaea

ttgtttttgt ctagtgtctc aagcttctct accaagagag tcatatttct tatctccacc

gtctttgtct tctctgagaa ttgcattccc tgccagga

240

300

360

60

120

180

240

300

360

40

43

60

45 <210> SEQ ID NO: 2 46 <211> LENGTH: 423 47 <212> TYPE: DNA

52 <400> SEQUENCE: 2

62 <210> SEQ ID NO: 3 63 <211> LENGTH: 538 64 <212> TYPE: DNA

50 <213> ORGANISM: Homo sapien

65 <213> ORGANISM: Homo sapien



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Input Set : A:\471cll.app
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67 <400> SEQUENCE: 3	
68 ggtctgtcca atggcaacag gaccctcact ctaytcartg tcacaagraa tgayrcagsa	60
69 msctayraat gtgaaaycca gaacccagtg agtgccarsc gcagtgayyc agtcatcctg	120
70 aatgteetet atggeerga tgmeeceace attteeeete taaacacatm ttaeegwyca	180
71 ggggaaaate tgaacetete etgecaegea geetetaace cacetgeaca gtactettgg	240
72 tttrtcaatg ggactttcca gcaatccacm caagagctct ttatccccaa catcactgtg	300
73 aataatagyg gateetatae gigecaagee cataacteag meactggeet caataggace	360
74 acaqtcacqa cqatcacaqt ctatqcaaqa qccacccaaa cccttcatca ccaqcaacaa	420
75 ctccaacccc gtggaggatg aggatgctgt agccttaacc tgtgaacctg agattcagaa	480
76 cacaacctac ctgtggtggg taaataatca gagcctcccg gtcagtccca ggctgcag	538
78 <210> SEQ ID NO: 4	
79 <211> LENGTH: 309	
80 <212> TYPE: DNA	
81 <213> ORGANISM: Homo sapien	
83 <400> SEQUENCE: 4	
84 tggtaascca aaaagatgct ggggcagatt gtggacaagt agaagaacct ccttcccctc	60
85 tgcgaacatt gaacggcgtg gattcaatag tgagcttggc agtggtgggc gggttccaga	120
86 aggitagaag tgaggotgtg agcaggagoo cotgooaggg gatvoacgca mtotgtgggg	180
87 aggggctgag rggdgwcycc atggtctctg ctgtctgctc tgtcctcctc tgtggagaag	240
88 agettgaget ceaggaacge tttgrteavg getgeetgtg acetytgete tgbtetgeet	300
89 qcccqqqcq	309
91 <210> SEQ ID NO: 5	303
92 <211> LENGTH: 412	
93 <212> TYPE: DNA	
94 <213> ORGANISM: Homo sapien	
96 <400> SEQUENCE: 5	
97 gtccaatggc aacaggaccc ctcacttcta ttcaatgtca caagaaatga cgcaagagcc	60
98 tatgtatgtg gaatccagaa ctkcagtgag tgcaaaccgc agtgacccag tcaccctgga	120
99 tgtcctctat gggccagaca sececcatca tttccccccc agactcgtct tacctttcgg	180
100 gagcgaacct caacctctcc tgccactcgg cctctaaccc atccccgcag tattcttggc	240
101 kgtatcaatg ggataccgca gcaacacaca caagttotot ttatcgccaa aatcacgcca	300
102 aataataacg ggacctatgc ctgttttgtc tctaacttgg ctactggccc gcaataattc	360
103 catagtcaag agcatcacag tettetgeat etggaactte teetggtett et	412
105 <210> SEQ ID NO: 6	
106 <211> LENGTH: 332	
107 <212> TYPE: DNA	
108 <213> ORGANISM: Homo sapien	
110 <400> SEQUENCE: 6	
111 gtgcaagggc tttacaaaaa ctgtgccagt krcttctyca tgwsrcwrga tctgacttka	60
112 ttsaygtikt atgagsysya saatmetgaw getemttyts sakgrwstie kgsatmrgea	120
113 gtsrattcsa catttgggrt akrtymtete tsgaagysam tgtcakgcag tgrcayccwr	180
114 gkktcwgcwt gcwgtgrgtt amcakcmwtr ywtagkgsgm ayatrattta ramrgtayak	240
115 cymtctcmct cytycmccay wtgcwcaass mkcacactc ggccgcgacc acgctaagcc	300
116 cgaattccag cacactggcg gccgttacta qt	332
118 <210> SEQ ID NO: 7	
119 <211> LENGTH: 401	
120 <212> TYPE: DNA	
121 <213> ORGANISM: Homo sapien	
123 <400> SEQUENCE: 7	
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125 ag 126 ta 127 to 128 te	gtgttgtt ggcgccagtt ttgttagt tcgggaggtg agatgagg tggctccttg tggtccag gatgacggct ccctgcca aacgtagagc gcaggtaa gcaagttcgc	cctccctggt cccattggga tgataagctg aggtaatgct	agaccaccat cccggatctg atgctgtaat gcttctcgcc	gcgtcccttg gactggttca ttcatcttgg gatgaaggta	aagatggaca ccattgtact ctggcctggc ggtgtaagag	60 120 180 240 300 360
132 <2: 133 <2: 134 <2: 135 <2:	ggcggccc gttactagtg 0> SEQ ID NO: 8 1> LENGTH: 1151 2> TYPE: DNA 3> ORGANISM: Homo s 0> SEQUENCE: 8		ctcggtacca	a		401
138 ct	ctctccat aaaactcagc tctgccac atacaaagca					60 120
						180
	ggtccctc gaggagctcc					240
	catggaag aattagtggt					300
	caaagaat ccctagacgc					360
	tagtgaag cctcctcaca				-	420
	tcccaccc tagacagact					
	aactcacc aaatcaagac					480
	cattgctg caaaatgaac					540
	gactattt tttcaacaaa					600
	ttctgcaa gacagaaaga					660
	tggtcaaa agggttatag					720
	tctagttt gccctctttc					780
	gtgtttca tagtacgggt					840
	tggtttat actgcttggt					900
	actaatca ccatgttacc					960
	atccacag caaagtcaat					1020
	ggcagcat tagggagagt					1080
	aatattcc cggtgttgta	catgttgacg	tacatgttgt	tgttgtaaac	tgctgtacca	1140
	accttgga c					1151
	0> SEQ ID NO: 9					
	1> LENGTH: 604					
	2> TYPE: DNA					
	3> ORGANISM: Homo s	apien				
	0> FEATURE:					
	1> NAME/KEY: misc_f					
	2> LOCATION: (1)		2 0			
	3> OTHER INFORMATIO	$\mathbf{N}: \mathbf{n} = \mathbf{A}, \mathbf{T}, 0$	or G			
	0> SEQUENCE: 9				*****	60
	gtgcaagg gctttacaaa					120
	tgttttat gagccccaca ttccacat ttgggatagg					120 180
	ttocacat tigggatagg tgcatgca gtgggttaac					240
	tocotoot cocceacate					300
	taaagtgt gatacttkgg				-	360
	aattggcg gagagctgcc					420
	aattygeg gagagetgee ctttntta ataacttttg					480
M> 1// EC	ctituita ataactitig	acagacaggg	getagtegea	cayacccctg	ggaageeetg	400

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	178 179 180	tcctgaggtc tgttggctgg aggctgcaga acattggtga tgacatggac cacgccattt	540 600 604
		<211> LENGTH: 473	
		<212> TYPE: DNA	
		<213> ORGANISM: Homo sapien	
		<400> SEQUENCE: 10	
	188	togagaagat coctagtgag actttgaacc gtatootggg cgacccagaa gccctgagag	60
	189		120
	190 191		180
	191		240
	192		300 360
	193	.,,,.	420
			473
		<210> SEO ID NO: 11	4/3
		<211> LENGTH: 411	
		<212> TYPE: DNA	
		<213> ORGANISM: Homo sapien	
		<220> FEATURE:	
	203	<221> NAME/KEY: misc_feature	
		<222> LOCATION: (1)(411)	
	205	<223> OTHER INFORMATION: n = A,T,C or G	
		<400> SEQUENCE: 11	
	208	tecteatigg teggggeeaa aagegigtae iggeegitae etteaageat egigtigage	60
	209	cctgatgcag ccacagcagc ccgaagggtc tcaaaggtgt cctcgatctc aatgatctgc	120
	210	tggatgttgt tggtgatggt ggagatgacc ttatcgatga ggtgcaccac cccgttggtt	180
	211		240
M>			300
	213		360
W>			411
		<210> SEQ ID NO: 12	
		<211> LENGTH: 560	
		<212> TYPE: DNA	
		<213> ORGANISM: Homo sapien	
	221	<400> SEQUENCE: 12	60
	223	tacttgcctg gagatwgcyt tykckwtmtg ytcwrawgtc cgtggataca gaaatctctg caggcaagtt gctccagagc atattgcagg acaagcctgt aacgaatagt taaattcacg	120
	224		180
	225		240
	226		300
	227		360
	228		420
	229		480
	230		540
	231		560
	233	<210> SEQ ID NO: 13	
	234	<211> LENGTH: 150	
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Input Set : A:\471cll.app

Output Set: N:\CRF3\09132000\1649811.raw

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235 <212> TYPE: DNA
     236 <213> ORGANISM: Homo sapien
     238 <400> SEQUENCE: 13
          gggcaggctg tcttttaaa atgtctcggc tagctagacc acagatatct tctagacata
                                                                                   60
     239
          ttgaacacat ttaagatttg agggatataa gggaaaatga tatgaatgtg tatttttact
                                                                                   120
     240
                                                                                   150
     241 caaaataaaa gtaactgttt acgttggtga
     243 <210> SEQ ID NO: 14
     244 <211> LENGTH: 403
     245 <212> TYPE: DNA
     246 <213> ORGANISM: Homo sapien
     248 <400> SEQUENCE: 14
     249 ctgctgcctg tggcgtgtgt gggctggatc ccttgaaggc tgagtttttg agggcagaaa
     250 gctagctatg ggtagccagg tgttacaaag gtgctgctcc ttctccaacc cctacttggt
251 ttccctcacc ccaagcctca tgttcatacc agccagtggg ttcagcagaa cgcatgacac
                                                                                   120
                                                                                   180
     252 cttatcacct ccctccttgg gtgagctctg aacaccagct ttggcccctc cacagtaagg
                                                                                   240
     253 ctgctacatc aggggcaacc ctggctctat cattttcctt ttttgccaaa aggaccagta
                                                                                   300
     254 gcataggtga gccctgagca ctaaaaggag gggtccctga agctttccca ctatagtgtg
                                                                                   360
     255
          gagttctgtc cctgaggtgg gtacagcagc cttggttcct ctg
                                                                                   403
     257 <210> SEQ ID NO: 15
     258 <211> LENGTH: 688
     259 <212> TYPE: DNA
     260 <213> ORGANISM: Homo sapien
     262 <220> FEATURE:
     263 <221> NAME/KEY: misc_feature
     264 <222> LOCATION: (1)...(688)
     265 <223> OTHER INFORMATION: n = A, T, C or G
     267 <400> SEQUENCE: 15
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                                                                                   60
     269
          tatagactag gacttgaaca tcaaaggaaa aatagacaaa gactagatga taaagtcatt
                                                                                   120
     270 caaaagcaca gaagcacatc acatacacca gcaaggtttc caactactgc actgattaac
                                                                                  180
         tagatactct caatagcttt tctatagctc gtcctagaaa aaaaaattaa attttcattt
                                                                                   240
     271
     272 tottacaagt tocaggotta aacaaaggoa aaaattacat goaacaactg atacactcat
                                                                                   300
                                                                                   360
     273
         aagttgcaca tatgctccaa ggtctttatt agataacaat aaatgctagc actttgtcac
     274 tgccatcaga ttttccttat agtcttagag tcatgtaaat aaaagttcca taatgaaatt
                                                                                   420
     275 aaagaaaatt aatttttcta atcttagatc agttccatag aaaactatta attttttaa
                                                                                   480
     276 agtaggcagt agaagggggt tggtgggggg tggaattggt tagtaagtct ggttctaatc
                                                                                  540
                                                                                  600
     277 ttctgagctg cctttggaag gaagttatga ggtagaagat tctactgact tttagtaagg
W--> 278 tggacaatga gagaaaagaa aaagcaggtg cctcatcnnc agatccttnt ggtatttatn
                                                                                  660
W--> 279 tgccangtnc nanntaatnc atanaaag
                                                                                   688
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     282 <211> LENGTH: 408
     283 <212> TYPE: DNA
     284 <213> ORGANISM: Homo sapien
     286 <400> SEQUENCE: 16
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                                                                                  120
     288 agtttatgat tacaggtgga aatctacaag acagtaaaga tgcactgcat ttggcacaaa
          caaatggtat gtttttcagt acagttggat gtcgtcctac aagatgtggt gaatttgaaa
                                                                                  180
     289
     290
          agaataaccc tgatctttac ttaaaggagt tgctaaatct tgctgaaaac aataaaggga
                                                                                  240
     291 aagttgtggc aataggagaa tgcggacttg attttgaccc gactgcagtt ttgtcccaaa
                                                                                  300
```

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

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Input Set : A:\471cll.app

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L:18 M:270 C: Current Application Number differs, Wrong Format L:36 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 L:176 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 L:177 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 L:212 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 L:214 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 L:278 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 L:279 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 L:365 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21 L:384 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22 L:412 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24 L:430 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25 L:431 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25 "Xaa" "n" or L:433 M:341 W: (46) used, for SEO ID#:25 L:434 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25 L:451 M:341 W: (46) "n" or "Xaa" used, for SEO ID#:26 L:452 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26 L:453 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26 L:454 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26 L:467 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27 L:468 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27 L:469 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27 L:470 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27 L:471 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27 L:472 M:341 W: (46) "n" or "Xaa" used, for SEO ID#:27 L:473 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27 L:489 M:341 W: (46) "n" or "Xaa" used, for SEO ID#:28 L:590 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:35 L:591 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:35 L:592 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:35 L:593 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:35 L:620 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37 L:621 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37 L:622 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37 L:623 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37 L:624 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37 L:625 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37 L:626 M:341 W: (46) "n" or "Xaa" used, for SEO ID#:37 (46) "n" or "Xaa" used, for SEQ ID#:39 L:653 M:341 W: L:656 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:39 L:688 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:41 L:691 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:41 L:692 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:41 L:749 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:45 L:766 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:46 L:768 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:46 L:813 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:49 L:826 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:50

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Input Set : A:\471cll.app
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L:827 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:50 L:828 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:50 L:829 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:50